PO. Box 421 Eureka, Utah 84628 (801) 433-6804 FAX (801) 433-6803



North Lily Mining Company

April 10, 1996

State of Utah Attn: Compliance and Monitoring Program Division of Water Quality 288 North 1460 West P.O. Box 144870 Salt Lake City, Utah 84114-4780

RE: First Quarter Monitoring Report 1996

Dear Compliance and Monitoring Personnel:

In compliance with Part II of the Ground Water Discharge Permit No. 23000 issued to North Lily Mining Company in May 1991, please find enclosed:

- 1. Pad and pond sump logs for the first quarter of 1996
- 2. Well water analysis for first quarter of 1996
- 3. Spillway samples for the first quarter 1996

All analysis of solution taken from sump samples were composite and delivered to Rocky Mountain Geochemical Corp., in Salt lake City, Utah for analysis. The analytical method used to determine gold and silver values was an atomic absorption spectrometer and all analysis were preformed by Mr. Jim Cardwell of Rocky Mountain Geochemical. Values reported on the sump logs ie. - gold, silver and sodium cyanide levels are reported in parts per million, and the gallons, represent gallons in a 24 hour period.

The pad and pond sumps continue to be checked on a regular basis, but due to the reduced volume of solution in the system detectable levels are not often found. Only on days when solutions have been pumped from a sump are they recorded.

Well water samples were delivered to Chemtec, a Utah certified laboratory, on March 5, 1996 for analysis with a request that the water be analyzed per the specification required by the Division of Water Quality.

Spillway samples have been taken to monitor the reduction of metals and cyanide in the solution coming off the heap leach pads. This has been done to enable North Lily to better meet and comply with state and federal water quality standards. The following table outlines the progress to date on some of the metals and cyanide (all analysis are reported in mg/l):

Page 2 First Quarter Monitoring Report 1996

PARAMETER	*GROUND WATER OUALITY	•	DETECTED IN					
	STANDARD	JUL 1993	DEC 1994	MAR 1995	SJUN 1995	SEP 1995	DEC 1995	MAR 1996
Fluoride as F	2.4	1.60	7.88	2.49	4.94	5.2	5.7	3.5
Arsenic as As	0.05	0.916	0.286	0.604	0.59	0.814	0.500	1.3
Barium as Ba	2.0	<.1	0.031	0.016	0.018	0.02	<0.20	<0.05
Cadmium as Cd	0.005	<.1	<.001	<.001	<.001	<0.01	<0.05	<0.025
Chromium as Cr	0.1	<1	<.007	<.01	<.007	<0.01	<0.05	<0.025
Copper as Cu	1.3	1110	430	340	283	255	188	162
Lead as Pb	0.015	<.2	0.155	0.088	0.066	0.100	0.100	<0.04
*Mercury as Hg	0.002	0.141	0.255	0.388	0.0020	0.232	0.329	0.39
Selenium as Se	0.05	0.529	0.122	0.140	0.24	0.17	0.024	0.03
Silver as Ag	0.05	4.41	0.061	3.61	1.8	4.24	3.43	0.56
Zinc As Zn	5.0	0.381	.661	0.093	0.500	0.19	0.20	0.08
Cyanide as CN-T	0.75	1480	579	344	256	300	*NOTE	163
Cvanide as CN-Wad	0.20	1264	N/R	77.6	239	291	169	153
Cvanide as CN- Free	N/A	512	N/R	INTER	179	*NOTE	312	*NOTE 1
рĤ	6.5 to 8.5	10.0	8.61	9.41	8.82	9.31	8.95	9.39

- * Administrative Rules For Ground Water Quality Protection Effective Date of Last Revision March 20, 1995
- * Digested analyzed by AWAL
- * Note: Free Cyanide test experienced matrix interference. No reported value provide
- * Note 1: Free Cyanide analysis experienced significant interference. No value was obtained.

As the above table indicates, there was a slight increase in arsenic but all other metals and cyanide decreased during the last quarter. We believe this is due to moisture received in winter storms that covered the entire heap during the last quarter of 1995 and the first quarter of 1996. North Lily is pleased that for the most part there is a downward trend in all metals and cyanide in the solutions coming off the heap leach pads.

The amount of moisture received (14.56 inches of rain and 52.12 inches of snow) has helped enormously in the reduction of metals and cyanide in the solutions coming from the heap leach pads. It has also been a benefit because of the overall coverage on the heap leach pads that could only be obtained by moisture received in the form of rain and/or snow. Because of the amount of moisture received from nature this year no fresh water was added to the system.

Nature continues to helped in the rinsing of the heap leach pads at North Lily's Silver City operation this year. The following table lists the moisture received by month to date this year (amounts are reported in inches):

PRECIPITATION LOG FOR 1996

<u>DATE</u>	MOISTURE AS RAIN	AMOUNT IN SNOW
January	0.626	20.75





Date: 3/29/96

To: NORTH LILY MINING CO.

P.O. BOX 68

EUREKA, UT 84628

Group #: 7024 Lab #: 96-U002417

Project: SILVER CITY PROJECT Sample Desc: Well Water Inlet

Date Sampled: 3/5/96 Date Submitted: 3/5/96

Time Sampled: 8:00 Time Received: 10:15

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED		METHOD	ANALYST
INORGANIC PARAMETERS			•			
Beryllium (T), as Be, mg/L	< 0.001	0.001	3/ 6/96	12:39	EPA 200.7	LH
Cadmium (T), as Cd, mg/L	< 0.005	0.005				
Calcium (T), as Ca, mg/L	59.3	0.1	3/ 6/96		EPA 200.7	
Chromium(T), as Cr, mg/L	< 0.005	0.005	3/ 6/96		EPA 200.7	LH
Copper (T), as Cu, mg/L	< 0.01	0.01	3/ 6/96	12:39	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.09	0.01	3/ 6/96	12:39	EPA 200.7	LH
Lead (T), as Pb, mg/L	0.01	0.04	3/ 6/96	12:39	EPA 200.7	LH
Magnesium (T), as Mg, mg/L	32.8	0.1	3/ 6/96	12:39	EPA 200.7	LH
Manganese (T), as Mn, mg/L	0.01	0.01	3/ 6/96	12:39	EPA 200.7	LH
Nickel (T), as Ni, mg/L	< 0.01	0.01	3/ 6/96	12:39	EPA 200.7	LH
Potassium (T), as K, mg/L	3.4	0.1	3/ 6/96	12:39	EPA 200.7	LH
Silver (T), as Ag, mg/L	< 0.005	0.005	3/ 6/96	12:39	EPA 200.7	LH
Sodium (T), as Na, mg/L	57.4	0.1	3/ 6/96	12:39	EPA 200.7	LH
Zinc (T), as Zn, mg/L	0.09	0.01	3/ 6/96	12:39	EPA 200.7	LH
Antimony (T), as Sb, mg/L	< 0.003	0.003				
Selenium (T), as Se, mg/L	< 0.002	0.002	3/11/96		EPA 200.9	EG
Thallium (T), as Tl, mg/L	0.001	0.001	• • • • • • • • • • • • • • • • • • • •		EPA 200.9	LH
Cation, meg/L	8.25			•		•
Anion, meg/L	8.84				* - 1 - 1 - 1 - 1	•
% Difference, %	3.50				,	
Receiving Temperature, C	10	Ö	3/5/96	10:15	1	RCG

Approved By:

{generic.rpt}



Date: 3/29/96

To: NORTH LILY MINING CO.

P.O. BOX 68

EUREKA, UT 84628

Group #: 7024 Lab #: 96-U002417

Project: SILVER CITY PROJECT Sample Desc: Well Water Inlet

Date Sampled: 3/5/96 Date Submitted: 3/5/96

Time Sampled: 8:00 Time Received: 10:15

CERTIFICATE OF ANALYSIS

METHOD ANALYST

INORGANIC PARAMETERS

NOTE: Sample submitted on ice.

Approved By:

Page 3 First Quarter Monitoring Report 1996

February March	1.905 1.421		20.25 9.25	
First Quarter Total	3.952	•	50.25	

The portable carbon column plant added to the system in November of 1994, and through which solutions coming from the pads were circulate, continued to be used through January. The plant was returned on February 9, 1996. The plant had a multi beneficial effect on the operation, several of which were; gold and silver values were recovered, this offset some of the monitoring costs, all base metals were reduced in the solutions coming from the pads, and the complex wad cyanide compounds that have been building in the system are being broken down, all of which brings the solution closer to water quality standards.

At this time metals, cyanide and other complex compounds that exceed water quality standards are being evaluated to determine the most effective way to bring them into compliance with water quality standards.

North Lily's Ground Water Quality Permit expires in May 1996. In the request for an extension North Lily will submit a detailed plan for closer.

If you have questions and/or comments, please call.

Paul C. Spor or Paul C. Spor
Eureka Office St. George Office
P.O. Box 421 390 South 600 East
Eureka, Utah 84628 St. George, Utah 84770
801-433-6804 Phone 801-634-1584 Phone/Fax/Messages
801-433-6803 Fax

Sincerely,

Paul C. Spor General Manager

cc: Roger A. Foisy, Division of Water Quality ... Wayne Hedberg, Division of Oil, Gas, and Mining

CHEMTECH-FORD



DIV. CEC. (13 Q. MINUS

Case Narrative #: 1010

This sample is a member of a set where the spiked sample was out of control. The silver spike recovered 135.5% and 141.0%. The limit is 110% recovery.

The sample was digested in conjunction with a Laboratory Fortified Blank (LFB). The LFB passed its control limits showing the digestion procedure to be in control.

The samples were bracketed by Instrument Performance Check standards (IPCs) which were within acceptable QA recovery limits and show that the analytical instrument was properly calibrated.

Because all data is bracketed by valid IPCs and the LFB passed, the data is believed to meet the method criteria. The enhanced QC spike recovery is due to matrix interference / enhancement.





Date: 3/31/96

To: NORTH LILY MINING CO.

P.O. BOX 68

EUREKA, UT 84628

Group #; 7024

Lab #: 96-U002418

Project: SILVER CITY PROJECT Sample Desc: Spillway Sample

Date Sampled: 3/5/96 Date Submitted: 3/5/96 Time Sampled: 8:10 Time Received: 10:15

CERTIFICATE OF ANALYSIS

· ·	•		DATE		• • • • •
PARAMETER	RESULT	MDL	ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Receiving Temperature, C	10	0	3/ 5/96 10:15		RCG

NOTE: Sample submitted on ice.

Free CN analysis experienced significant interference. No value was obtained.

See case narrative 1010 for Ag by ICP.

Approved By

{generic.rpt}

801 262 7299 PHONE 801 262 7378 FAX

6100 SOUTH STRATLER SALT LAKE CITY UTAH 84107 6905







Date: 3/31/96

To: NORTH LILY MINING CO.

P.O. BOX 68

EUREKA, UT 84628

Group #: 7024 Lab #: 96-U002418 Project: SILVER CITY PROJECT Sample Desc: Spillway Sample

Date Sampled: 3/5/96 Date Submitted: 3/5/96

Time Sampled: 8:10 Time Received: 10:15

CERTIFICATE OF ANALYSIS

			DATE			
PARAMETER	RESULT	MDL	ANALYZED		METHOD	ANALYST
INORGANIC PARAMETERS			•			
Arsenic (T), as As, mg/L	1.3	0.3	3/15/96	11:25	EPA 200.7	MA
Barium (T), as Ba, mg/L	< 0.05	0.05	3/15/96	11:25	EPA 200.7	MA
Beryllium (T), as Be, mg/L	< 0.005	0.005	3/15/96	11:25	EPA 200.7	MA
Cadmium (T), as Cd, mg/L	< 0.025	0.025	3/15/96	11:25	EPA 200.7	MA
Calcium (T), as Ca, mg/L	152	0.5	3/15/96	11:25	EPA 200.7	· MA
Chromium(T), as Cr, mg/L	< 0.025	0.025	3/15/96	11:25	EPA 200.7	MA
Copper (T), as Cu, mg/L	162	0.05	3/15/96	11:25	EPA 200.7	MA
Iron (T), as Fe, mg/L	0.06	0.05	3/19/96	18:00	EPA 200.7	MA
Lead (T), as Pb, mg/L	< 0.4	0.4	3/15/96	11:25	EPA 200.7	MA
Magnesium (T), as Mg, mg/L	4.4	0.5	3/15/96	11:25	EPA 200.7	MA ·
Manganese (T), as Mn, mg/L	< 0.05	0.05	3/15/96	11:25	EPA 200.7	MA, "
Nickel (T), as Ni, mg/L	0.87	0.05	3/15/96	11:25	EPA 200.7	MA
Potassium (T), as K, mg/L	258	0.5	3/15/96	11:25	EPA 200.7	MA
Silver (T), as Ag, mg/L	0.56	0.025	3/15/96	11:25	EPA 200.7	MA
Sodium (T), as Na, mg/L	5,030	0.5	3/15/96	11:25	EPA 200.7	MA
Zinc (T), as Zn, mg/L	0.08	0.05	3/15/96	11:25	EPA 200.7	MA
Antimony (T), as Sb, mg/L	0.02	0.015	3/21/96	10:30	EPA 200.9	EG .
Selenium (T), as Se, mg/L	0.03	0.01	3/21/96	16:00	EPA 200.9	EG
Thallium (T), as Tl, mg/L	< 0.005	0.005	3/21/96	18:00	EPA 200.9	EG ·
Cation, meg/L	233					
Anion, meq/L	273					
% Difference, %	7.80	0.1			•	

Approved By:



Date: 3/31/96

To: NORTH LILY MINING CO. P.O. BOX 68

EUREKA, UT 84628

Group #: 7024 Lab #: 96-U002418

Project: SILVER CITY PROJECT Sample Desc: Spillway Sample

Date Sampled: 3/5/96 Date Submitted: 3/5/96

Time Sampled: 8:10 Time Received: 10:15

CERTIFICATE OF ANALYSIS

· ·			DATE			
PARAMETER	RESULT	MDL	ANALYZED		METHOD	Analyst
INORGANIC PARAMETERS						
Bicarbonate as HCO3, mg/L	5	1	3/ 6/96	9:30	SM 2320B	TM
Carbonate as CO3, mg/L	340	1	3/ 6/96	9:30	SM 2320B	TM
Alkalinity, Solids, mg/L	342	1	3/ 6/96	9:30	SM 2320B	TM
Hydroxide as OH, mg/L	< 1	1	3/ 6/96	9:30	SM 2320B	TM
Alkalinity, Total, mg/L	570	1	3/6/96	9:30	SM 2320B	TM
Carbon Dioxide, mg/L	253	. 1	3/6/96	9:30	SM 4500 D	TM
Chloride, mg/L	2,540	25	3/6/96	13:00	EPA 325.3	TM
Conductance, Specific, umhos/cm	22,500	0.1	3/ 8/96	3:30	EPA 120.1	DI
	mment	0.002	3/24/96	6:30	ASTM D2036	DI
Cyanide (T), mg/L	163	0.4	3/13/96	10:30	ASTM D2036	DI
Cyanide, WAD, mg/L	153	· 4	3/21/96	2:30	ASTM D2036	DI
Fluoride, mg/L	3.5	0.5	3/11/96	10:15	EPA 340.2	DI '
Hardness, (calc), mg/L	397	· 1	3/22/96	9:15	CAL	RH
Mercury (T), as Hg, mg/L	0.39	0.013	3/ 6/96	16:21	EPA 245.1	KA
Nitrite, Nitrogen, mg/L	0.3	0.125	3/ 5/96	19:45	EPA 354.1	KA
Nitrate/Nitrite-Nitrogen, mg/L	8.1	0.2	3/ 6/96	11:50	EPA 353.1	TH
pH, units	9.39	0.05	3/6/96	9:30	EPA 150.1	TM
Phosphorus, Ortho, mg/L	0.21	0.01	3/ 5/96	19:00	SM 4500	KA
Sulfate, mg/L	9,100	2500	3/27/96	12:30	EPA 375.4	TH
Total Dissolved Solids, mg/L	19,000	50	3/11/96	2:25	EPA 160.1	MO
Total Suspended Solids, mg/L	14	2.5	3/12/96	13:45	EPA 160.2	LS
Turbidity, NTU	8.29	0.05	3/ 6/96	9:30	EPA 180.1	LS

Approved By:

{generic.rpt}





Date: 3/29/96

To: NORTH LILY MINING CO.

P.O. BOX 68

EUREKA, UT 84628

Group #: 7024 Lab #: 96-U002417

Project: SILVER CITY PROJECT Sample Desc: Well Water Inlet

Date Sampled: 3/5/96 Date Submitted: 3/5/96

Time Sampled: 8:00 Time Received: 10:15

CERTIFICATE OF ANALYSIS

	•					
PARAMETER	RESULT	MDL	ANALYZED		METHOD	analyst
INORGANIC PARAMETERS		•	# 			•
Bicarbonate as HCO3, mg/L	139	1	3/ 6/96	9:30	SM 2320B	TM
Carbonate as CO3, mg/L	< 1	1	3/ 6/96	9:30	SM 2320B	TM
Alkalinity, Solids, mg/L	68	1	3/ 6/96	9:30	SM 2320B	TM
Hydroxide as OH, mg/L	< 1	. 1	3/ 6/96	9:30	SM 2320B	TM
Alkalinity, Total, mg/L	114	1	3/ 6/96	9:30	SM 2320B	TM
Carbon Dioxide, mg/L	102	1	3/ 6/96	9:30	SM 4500 D	TM
Chloride, mg/L	146	5	3/ 6/96	13:00	EPA 325.3	TM
Conductance, Specific, umhos/cm	870	0.1	3/ 8/96	3:30	EPA 120.1	DI
Cyanide (T), mg/L	< 0.002	0.002	3/13/96	10:30	ASTM D2036	5 DI
Fluoride, mg/L	0.2	0.1	3/11/96	10:15	EPA 340.2	DI
Hardness, EDTA Titration, mg/L	283	12	3/ 7/96	12:00	EPA 130.2	TM
Mercury (T), as Hg, mg/L	< 0.0002	0.0002	3/ 6/96	16:21	EPA 245.1	KA
Nitrite, Nitrogen, mg/L	0.008	0.005	3/ 5/96	19:45	EPA 354.1	KA
Nitrate/Nitrite-Nitrogen, mg/L	0.75	0.02	3/6/96	11:50	EPA 353.1	TH
pH, units	8.00	0.05	3/ 6/96	9:30	EPA 150.1	TM
Phosphorus, Ortho, mg/L	0.01	0.01	3/ 6/96	17:30	SM 4500	KA
Sulfate, mg/L	117	25	3/27/96	12:30	EPA 375.4	TM
Total Dissolved Solids, mg/L	536	5	3/ 7/96	1:30	EPA 160.1	MO
Total Suspended Solids, mg/L	< 2.5	2.5	3/12/96	13:45	EPA 160.2	LS
Turbidity, NTU	0.65	0.05	3/ 6/96	12:40	EPA 180.1	LS ·
Arsenic (T), as As, mg/L	< 0.06	0.06	3/6/96	12:39	EPA 200.7	LH
Barium (T), as Ba, mg/L	0.08	0.01	3/ 6/96	12:39	EPA 200.7	LH

Approved By: